IN THE CLAIMS

Please amend the claims as follows:

(Currently Amended) A method for tracking frequently occurring fail events that are 1. detected during testease computer-aided simulation of a simulation model hardware design within a batch simulation farm, said batch simulation farm wherein testcases are executed within respect to a simulation model on including one or more simulation clients for executing said computer-aided simulation, said method comprising:

within-an instrumentation server:

receiving a fail event packet[[s]] from said a simulation client[[s]], wherein said fail event packet[[s]] contains an aggregate of detected occurrences of a specified fail event; and

monitoring the rate of occurrence of said specified fail-event from received-fail-event packets to detect an excess rate of occurrence of said specified fail event

comparing the rate of occurrence of said specified fail event with a predetermined threshold rate;

responsive to the rate of occurrence of said specified fail event exceeding said predetermined threshold rate, adding said specified fail event to a fail event disable list maintained within an instrumentation server; and

prior to a subsequent testcase simulation of a simulation model within said one or more simulation clients:

> retrieving said fail event disable list; and disabling fail events specified within said fail event disable list.

(Currently Amended) The method of claim 1, further comprising: 2. within said-instrumentation server:

> maintaining a counter that specifies the rate of occurrences of said specified fail event;

reading said received aggregate fail event packet; and

responsive to said aggregate fail event packet including a recorded occurrence of said specified fail event, incrementing said counter.

U.S. Application No. 09/997,767

Amendment A - Page 4

- 3. (Original) The method of claim 2, further comprising decrementing said counter at a predetermined time interval such that a rate of occurrence of said specified fail event may be determined within said instrumentation server.
- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Currently Amended) The method of claim 1, wherein said monitoring the rate of occurrence of said specified fail event comparing the rate of occurrence of said specified fail event with a predetermined threshold rate is preceded by:

delivering an instrumentation eventlist from said simulation client to said an instrumentation server, wherein said eventlist contains instrumentation event information for said simulation model; and

within said instrumentation server:

computing a digital signature that uniquely identifies contents of said instrumentation eventlist as being associated with said simulation model; and

responsive to receiving simulation data from said simulation client, utilizing said digital signature to associate said simulation data with said simulation model.

- 7. (Original) The method of claim 6, wherein said instrumentation server computes said digital signature utilizing a cyclic redundancy check algorithm, said method further comprising computing a digital signature within said simulation client utilizing said cyclic redundancy check algorithm.
- 8. (Currently Amended) The method of claim 7, wherein said monitoring the rate of occurrence of said specified fail event comparing the rate of occurrence of said specified fail event with a predetermined threshold rate is preceded by:

responsive to receiving said aggregate fail event packet within said instrumentation server:

U.S. Application No. 09/997,767

Amendment A - Page 5

comparing the digital signature contained in said aggregate instrumentation <u>fail</u>
event packet with the digital signature computed by said instrumentation server to
determine whether or not a match exists;

responsive to the digital signature contained in said aggregate fail event packet matching the digital signature computed by said instrumentation server, processing said aggregate fail event packet within said instrumentation server; and

responsive to the digital signature contained in said aggregate instrumentation <u>fail</u> event packet not matching the digital signature computed by said instrumentation server, discarding said aggregate fail event packet.

9. (Currently Amended) A system for tracking frequently occurring fail events that are detected during test-ease computer-aided simulation of a simulation model hardware design within a batch simulation farm, said batch simulation farm wherein testenses are executed within respect to a simulation model on including one or more simulation clients for executing said computer-aided simulation, said system comprising:

an instrumentation server including processing means for:

receiving a fail event packet[[s]] from said a simulation client[[s]], wherein said fail event packet[[s]] contains an aggregate of detected occurrences of a specified fail event; and

monitoring the rate of occurrence of said specified fail event from received fail event packets to detect an excess rate of occurrence of said specified fail event

comparing the rate of occurrence of said specified fail event with a predetermined threshold rate:

responsive to the rate of occurrence of said specified fail event exceeding said predetermined threshold rate, adding said specified fail event to a fail event disable list maintained within an instrumentation server; and

prior to a subsequent testcase simulation of a simulation model within said one or more simulation clients:

> retrieving said fail event disable list; and disabling fail events specified within said fail event disable list.

(Currently Amended) The system of claim 9, wherein said instrumentation server further 10. comprises:

a counter that specifies the rate of occurrences of said specified fail event; processing means for reading said received aggregate fail event packet; and processing means responsive to said aggregate fail event packet including a recorded occurrence of said specified fail event for incrementing said counter.

The system of claim 10, further comprising processing means for (Original) 11. decrementing said counter at a predetermined time interval such that a rate of occurrence of said specified fail event may be determined within said instrumentation server.

U.S. Application No. 09/997,767

Amendment A - Page 7

- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Currently Amended) The system of claim 9, further comprising:

processing means for delivering an instrumentation eventlist from said simulation client to said an instrumentation server, wherein said eventlist contains instrumentation event information for said simulation model; and

within said instrumentation corver:

processing means for computing a digital signature that uniquely identifies contents of said instrumentation eventlist as being associated with said simulation model; and

processing means responsive to receiving simulation data from said simulation client for utilizing said digital signature to associate said simulation data with said simulation model.

- 15. (Original) The system of claim 14, wherein said instrumentation server computes said digital signature utilizing a cyclic redundancy check algorithm, said system further comprising processing means for computing a digital signature within said simulation client utilizing said cyclic redundancy check algorithm.
- 16. (Currently Amended) The system of claim 15, further comprising:

processing means responsive to receiving said aggregate fail event packet within said instrumentation server for:

comparing the digital signature contained in said aggregate instrumentation <u>fail</u> event packet with the digital signature computed by said instrumentation server to determine whether or not a match exists;

responsive to the digital signature contained in said aggregate fail event packet matching the digital signature computed by said instrumentation server, processing said aggregate fail event packet within said instrumentation server; and

U.S. Application No. 09/997,767

Amendment A – Page 8

responsive to the digital signature contained in said aggregate instrumentation fail event packet not matching the digital signature computed by said instrumentation server, discarding said aggregate fail event packet.

17. (Currently Amended) A computer program product for tracking frequently occurring fail events that are detected during test case computer-aided simulation of a simulation model hardware design within a batch simulation farm, said batch simulation farm wherein testcases are executed within respect to a simulation model on including one or more simulation clients for executing said computer-aided simulation, said computer program product comprising:

program instruction means for receiving a fail event packet[[s]] from said a simulation client[[s]], wherein said fail event packet[[s]] contains an aggregate of detected occurrences of a specified fail event; and

program instruction means for monitoring the rate of occurrence of said specified fail event from received fail event packets to detect an excess rate of occurrence of said specified fail event:

comparing the rate of occurrence of said specified fail event with a predetermined threshold rate;

responsive to the rate of occurrence of said specified fail event exceeding said predetermined threshold rate, adding said specified fail event to a fail event disable list maintained within an instrumentation server; and

prior to a subsequent testcase simulation of a simulation model within said one or more simulation clients:

> retrieving said fail event disable list; and disabling fail events specified within said fail event disable list.

18. (Currently Amended) The computer program product of claim 17, further comprising: program instruction means for implementing a counter that specifies the rate of occurrences of said specified fail event;

program instruction means for reading said received aggregate fail event packet; and program instruction means responsive to said aggregate fail event packet including a recorded occurrence of said specified fail event for incrementing said counter.

U.S. Application No. 09/997,767

Amendment A - Page 9

- 19. (Original) The computer program product of claim 18, further comprising program instruction means for decrementing said counter at a predetermined time interval such that a rate of occurrence of said specified fail event may be determined within said instrumentation server.
- 20. (Cancelled)
- 21. (Cancelled)
- 22. (Original) The computer program product of claim 17, further comprising:

program instruction means for delivering an instrumentation eventlist from said simulation client to said instrumentation server, wherein said eventlist contains instrumentation event information for said simulation model;

program instruction means for computing a digital signature that uniquely identifies contents of said instrumentation eventlist as being associated with said simulation model; and

program instruction means responsive to receiving simulation data from said simulation client for utilizing said digital signature to associate said simulation data with said simulation model.

- 23. (Original) The computer program product of claim 22, wherein said instrumentation server computes said digital signature utilizing a cyclic redundancy check algorithm, said computer program product further comprising program instruction means for computing a digital signature within said simulation client utilizing said cyclic redundancy check algorithm.
- 24. (Currently Amended) The computer program product of claim 23, further comprising:

 program instruction means responsive to receiving said aggregate fail event packet within said instrumentation server for:

comparing the digital signature contained in said aggregate instrumentation fail event packet with the digital signature computed by said instrumentation server to determine whether or not a match exists;

U.S. Application No. 09/997,767

Amendment A - Page 10

responsive the digital signature contained in said aggregate fail event packet matching the digital signature computed by said instrumentation server, processing said aggregate fail event packet within said instrumentation server; and

responsive to the digital signature contained in said aggregate instrumentation fail event packet not matching the digital signature computed by said instrumentation server, discarding said aggregate fail event packet.